

TEREBRATULINA D'ORBIGNY, 1847 (BRACHIOPODA): PROPOSED
DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS.
Z.N.(S.) 1809

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Purpose of the Application:

This application proposes to clear the difficulty created by the change in the description by Linnaeus to his species *Anomia caputserpentis* in 1758 and 1767. This species, *sensu* 1767, is the type-species of the genus *Terebratulina* d'Orbigny, 1847, and synonymous with the species *Anomia retusa* Linnaeus, 1758. Thus, as a result of d'Orbigny's misidentification of *A. caputserpentis* we wish to change the type-species of *Terebratulina* from *A. caputserpentis* Linnaeus, 1758, to *A. retusa* Linnaeus, 1758.

History:

2. This application arises from the recent review of the brachiopods in the Linnaean Collection (Brunton, Cocks and Dance 1967).

3. In the tenth edition of the *Systema Naturae* Linnaeus erected the species *Anomia caputserpentis* (1758 : 703, species number 200), describing it as follows: "A. testa ovata laevi gibba: valvula altera apice longiore. *Column. purp.* 22.f.1. Habitat . . . fossilis. Natium altera postice gibba perforata." In the same publication (1758 : 701, number 191) Linnaeus erected the species *Anomia retusa*, with the following description: "A. testa obovata striata retusa: convalle longitudinali, nate perforata. *Habitat in pelago Norvegico supra Alcyonia. D. Pennant.*" The two species are distinctive; the former being a smooth shelled fossil species and the latter a strongly ribbed living species.

4. Specimens of both these *Anomia* species are preserved in the Linnaean Collection and are those isolated by Hanley after the publication of his *Ipsa Linnaei Conchylia* (1855). Two specimens of *A. caputserpentis* Linnaeus, 1758, are preserved in oolitic calcareous matrix and there are four specimens of *A. retusa* Linnaeus, 1758, from Recent seas. Lectotypes for both species have been selected and figured (Brunton, Cocks and Dance, 1967).

5. In the twelfth edition of the *Systema*, Linnaeus (1767 : 1153) changed his description of *A. caputserpentis* to: "A. testa obovata striata tomentosa: valvula altera nate longiore perforata. *Fn. suc.* 2154. *Column. purp.* 22.f.2. *Gualt. test.t.* 96.f.D. *Habitat in abyssu M. Norvegici. Testa obovata, tomentoso, antice compressa, longitudinaliter striata, alba. Valvula superior postice prominens longiorque apice perforato ligamento affixo coralliis Zoo-phytisve; haec antice paulo longior & declinata. Inferior valvula rotundata, antice retusa, postice brevior. Margo utriusque crenulatus. Cardo dente utriusque testae utrinque ad latus prominens," while that of *A. retusa* remained unchanged. Thus in the 1767 edition these two species appear to be indistinguishable and this change in concept of *A. caputserpentis* has resulted in ambiguity.*

6. In 1847 d'Orbigny erected the genus *Terebratulina* with *Anomia caputserpentis* as type-species. D'Orbigny clearly thought of this as the species as redefined in 1767, i.e. the species subsequently considered as synonymous with *Anomia retusa*, because he illustrated a brachial valve interior (1847, pl. 7, fig. 17) which is closely comparable to Recent *A. retusa* now in the Linnaean Collection. This internal morphology is not what we should expect to see within the smooth shelled fossil species *A. caputserpentis* Linnaeus, 1758.

7. Most subsequent authors (Hanley 1855 : 123; Davidson, 1856 : 17) have recognised that *A. caputserpentis* Linnaeus, 1767, is synonymous with *A. retusa* Linnaeus, 1758. Dall (1920 : 296) also recognised this, but is in error to place *A. retusa* as the type-species of *Terebratulina* without further discussion.

8. Since the erection of the genus *Terebratulina* d'Orbigny there has been no doubt as to its definition and the smooth species *Anomia caputserpentis* Linnaeus, 1758, could never be accommodated within this genus. However, despite the work of Dall (1920) and Thompson (1927 : 186) who stressed that *Anomia retusa* should be considered the type-species of *Terebratulina*, the original name given by d'Orbigny remains in use.

9. We are now in the situation where it is generally agreed that *Anomia caputserpentis* Linnaeus, 1758, is not of the genus *Terebratulina* d'Orbigny; *A. caputserpentis* Linnaeus, 1767 = *A. retusa* Linnaeus, 1758; and that d'Orbigny's original concept of the genus *Terebratulina* is based upon the living species *A. caputserpentis* Linnaeus, 1767 [non 1758] which is the junior synonym of *A. retusa* Linnaeus 1758.

10. Thus, we feel it to be desirable to propose that the type-species of *Terebratulina* d'Orbigny, 1847, be changed from *Anomia caputserpentis* Linnaeus, 1758, to *Anomia retusa* Linnaeus, 1758. This disposes of the ambiguity which was originally caused by Linnaeus himself when he altered his definition of *A. caputserpentis* between 1758 and 1767.

Proposals

11. Therefore we request the International Commission:

(1) to use its plenary powers:

(a) to set aside all designations of type-species for *Terebratulina* d'Orbigny, 1847, and

(b) having done so to designate as the type-species of *Terebratulina* d'Orbigny, 1847, the nominal species *Anomia retusa* Linnaeus, 1758;

(2) to place the generic name *Terebratulina* d'Orbigny, 1847 (gender : feminine) on the Official List of Generic Names in Zoology;

(3) to place the specific name *Anomia retusa* Linnaeus, 1758, type-species of *Terebratulina* d'Orbigny, by the plenary powers of 1(b) above, on the Official List of Specific Names in Zoology.

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